REMARKS

Applicant has amended the specification and the claims such that all references to element 20 are now to "base 20", and likewise all references to element 21 are now to "forward end 21". Thus, the language is now consistent throughout and it is submitted there is now no need for correction of the drawings as requested by the Examiner. In addition, the amendments to the claims now obviate the Section 112 problems pointed out by the Examiner.

The claims have been amended in view of the Klein reference, a published application still pending in the Patent Office, which was first cited to Applicant in the final office action.

It is respectfully argued that the claims as now presented are patentable in view of the known prior art.

The Klein reference teaches a projectile of similar type to the projectile of the invention, but of a distinctly different structure. The claims have now been amended to better define the invention in terms of its patentably distinct structure.

Independent claim 27 has been amended to require structure inherent in the device whereby the projectile nose, the projectile base and the propulsion shell components as claimed are not anticipated nor made obvious by the prior art. In particular, the propulsion shell comprises "an annular forward wall having a forward shell rim, a shell base joined to said shell forward wall, and a propulsion cavity disposed in said shell base, said propulsion means being retained by said propulsion cavity." The projectile base comprises "a forward wall joined to a cylindrical wall to define a projectile cavity, and a rearward extending annular insertion flange, whereby said insertion flange is received within said shell rim and said shell forward wall such that said shell cavity and said projectile cavity are combined." The projectile nose comprises "a rear plug wall joined to a cylindrical wall and a forward end joined to said cylindrical wall, the

combination of said forward end, said cylindrical wall and said rear plug wall defining a nose cavity."

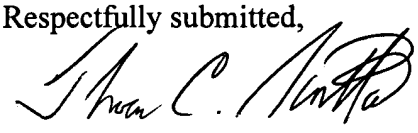
Independent claims 1 and 14 have been amended primarily by incorporating language requiring that the cylindrical wall of the projectile nose be thinner than the forward end of the nose, such that the payload is dispersed laterally through the cylindrical wall in multiple directions upon contact and such that the thinner cylindrical wall breaks prior to the forward end to absorb and dissipate impact energy. Although the Examiner has stated that this feature is anticipated by Klein and references Figure 2, element 20 as support for this, Applicant respectfully disagrees with this conclusion. The Examiner is mistakenly relying on the rough sketches provided by Klein, drawings which are so inadequate that 9 reasons on the Notice of Draftsperson's Patent Drawing Review (dated March 28, 2004 and enclosed as Attachment A) were checked off and replacement drawings have been required. Precise measurement of element 20 does show that it is drawn with slightly thinner walls over the short region where it abuts the end of element 17, but this is not a teaching, suggestion or motivation by the reference sufficient to anticipate or make obvious the claimed structure of Applicant whereby the thinner cylinder walls burst upon impact to disperse the payload laterally. The walls of Klein's nose 20 are only cylindrical in the region surrounding the insert member 19 - the nose 20 immediately becomes domed or rounded at all points beyond the end of the insert member 19. This is evidenced by the fact that Klein defines element 23 to be a "cylindrical annular surface of the interior wall 25 circumjacent to the open end of the nose 20" (emphasis added) in remarks and amendments to the specification and drawings filed October 27, 2004 (enclosed as Attachment B). Klein states that the "hollow body 20 includes a shaped wall 21 having a dome-shaped interior surface 25 that terminates in an annular end face 22" and "includes a cylindrical annular

surface 23 circumjacent to the annular end face 22 thereof, the annular surface 23 having a diameter that is slightly less than the outer diameter of the cap 75 to form a locking interface fitment therewith" (replacement paragraph 0039 - emphasis added).

Thus, Klein discloses a dome-shaped nose cavity for the payload, whereas the claimed invention at hand requires a payload cavity having a dome-shaped forward portion and a cylindrical rearward portion such that payload will be ejected therethrough. There is no teaching or suggestion in the disclosure of Klein that it would be desirable or useful to provide exposed cylindrical walls of reduced thickness in comparison to the forward end for the purpose of providing lateral walls that will burst prior to the forward end. Klein does not describe any portion of the nose as having thinner walls in the text. The domed cavity of Klein does not have any preferential bursting regions, since any thinner wall area is encircling the end of the insert member, and therefore would not function in the same manner as the invention at hand. Absent hindsight based on Applicant's disclosure, no reasonable or skilled practitioner would be led to construct a device as disclosed and claimed by Applicant from a review of Klein and the prior art.

It is respectfully submitted that the claims as amended are patentable, on the basis of the above remarks, and reconsideration and subsequent passage for allowance is hereby requested.

Respectfully submitted,



Thomas C. Saitta, Reg. No. 32102
Attorney for Applicant

Rogers Towers, P.A.
1301 Riverplace Blvd.
Suite 1500
Jacksonville, FL 32207

904-346-5518
904-396-0663 (fax)

ATTACHMENT A

Form PTO-948 (Rev. 06/03)
Application No. 09966725

U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

NOTICE OF DRAFTSPERSON'S PATENT DRAWING REVIEW

The drawing(s) filed (insert date) 9/28/01, 11/1/04, 11/19/04 are:

A. ____ approved by the Draftsperson under 37 CFR 1.84 or 1.152.

B. X objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. Corrected drawings are required.

1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings: Black ink or Color (3 sets required).

___ Color drawings are not acceptable until petition is granted. Fig(s)____

___ Pencil and non black ink not permitted. Fig(s)____

2. PHOTOGRAPHS. 37 CFR 1.84(b)

___ One (1) full-tone set is required. Fig(s)____

___ Photographs may not be mounted. 37 CFR 1.84(e)

___ Photographs must meet paper size requirements of 37 CFR 1.84(f). Fig(s)____

___ Poor quality (half-tone). Fig(s)____

3. TYPE OF PAPER. 37 CFR 1.84(e)

___ Paper not flexible, strong, white, and durable. Fig(s)____

X Erasures, alterations, overwritings. interlineations, folds, copy machine marks not accepted. Fig(s) 1-10

4. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes:

21.0 cm by 29.7 cm (DIN size A4) or
21.6 cm by 27.9 cm (8 1/2x 11 inches)

___ All drawing sheets not the same size. Sheet(s)____

___ Drawings sheets not an acceptable size. Fig(s)____

5. MARGINS. 37 CFR 1.84(g): Acceptable margins: Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm

X Margins not acceptable. Fig(s) All

X Top (T) X Left (L)

X Right (R) ____ Bottom (B)

6. VIEWS. 37 CFR 1.84(h)

REMINDER: Specification may require revision to correspond to drawing changes, e.g., if Fig. 1 is changed to Fig. 1A, Fig 1B and Fig. 1C, etc., the specification, at the Brief Description of the Drawings, must likewise be changed.

___ Views not labeled separately or properly. Fig(s)____

7. SECTIONAL VIEWS. 37 CFR 1.84(h)(3)

___ Sectional designation should be noted with Arabic or Roman numbers. Fig(s)____

8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i)

___ Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s)____

9. SCALE. 37 CFR 1.84(k)

___ Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction. Fig(s)____

10. CHARACTER OF LINES, NUMBERS, & LETTERS. 37 CFR 1.84(l)

X Lines, numbers & letters not uniformly thick and well defined, clean, durable, and black (poor line quality). Fig(s) 1-10

11. SHADING. 37 CFR 1.84(m)

___ Solid black areas pale. Fig(s) ____

___ Solid black shading not permitted. Fig(s)____

12. NUMBERS, LETTERS, & REFERENCE CHARACTERS. 37 CFR 1.84(p)

X Numbers and reference characters not plain and legible. Fig(s) 1-10

X Figure legends are poor. Fig(s) 1-10

___ Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(1) Fig(s)____

___ English alphabet not used. 37 CFR 1.84(p)(2) Fig(s)____

X Numbers, letters and reference characters must be at least 32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3). Fig(s) 1-10

13. LEAD LINES. 37 CFR 1.84(q)

___ Lead lines missing. Fig(s)____

14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.84(t)

___ Sheets not numbered consecutively, and in Arabic numbers beginning with number 1. Sheet(s)____

15. NUMBERING OF VIEWS. 37 CFR 1.84(u)

___ Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig(s)____

16. DESIGN DRAWINGS. 37 CFR 1.152

___ Surface shading shown not appropriate. Fig(s)____

___ Solid black surface shading is not permitted except when used to represent the color black as well as color contrast. Fig(s)____

COMMENTS:

Reviewer Tavay

If you have questions, call (703) 305-~~8404~~ 0333 x 132

Date 03/28/04

Attachment to Paper No. ____

☆ U.S. GOVERNMENT PRINTING OFFICE: 2003-300-153

ATTACHMENT B

3581

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	John M. Klein	Examiner:	Trinh T Nguyen
Serial Number:	09/966,725	Art Unit:	3581
Filing Date:	September 28, 2001		
Title:	NON-LETHAL PROJECTILE AMMUNITION		
Our File No.:	SAO-104-A-1		

REPLY TO OFFICE ACTION (37 CFR 1.111)

Hon. Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir/Madam:

In response to a Communication from the Patent Office dated July 28, 2004, not a final, please enter this Reply and amend the application as follows:

Amendments to the Drawings*: are on Page 2 of this Reply.

Amendments to the Specification: are on Pages 3-5 of this Reply.

Amendments to the Claims: are presented in a Listing of Claims on Pages 6-11 of this Reply.

Remarks/Arguments: are on Pages 12-16 of this Reply.

Conclusion: is on Page 17 of this Reply.

* Attachments: Corrected and Replacement Drawing Sheets
(Sheet 1 / 3, and Sheet 2 / 3)

Amendments to the Specification:

Amend paragraphs 20, 25, 26, 27, 28, 39, 40, and 41 of the Specification as indicated below:

[0020] In the practice of the present invention it has been found that a particularly preferred adhesive, indicated generally by the number 26 in FIG. 5, is a UV or ultraviolet light curable adhesive~~, indicated generally by the number 26 in FIG. 5~~. Ultraviolet light (UV) curable adhesives are known and, generally, comprise a mixture of a UV curable composition and a photoinitiator, which when exposed to an energy source, such as ultraviolet light, causes a cross-linking reaction to be effected, which cross-linking reaction creates a polymeric adhesive which seals the cartridge.

[0025] The ~~reduced-diameter section~~ tapered wall 33 of the rearward end portion 16 has ~~a tapered~~ an outside surface 35 that is generally frusto-conically shaped to aid in the balance and airflow of the projectile, and to prevent tumbling of the projectile in flight. The outside surface 35 begins at the ~~inserting~~ insertable rearward end 29 of the projectile body 15 and tapers radially outwardly when proceeding forwardly toward the circumferential medial collar 39.

[0026] The medial collar 39 is integrally formed with and located ~~medially~~ between the opposite ends 31 and 29 of the projectile body 15. The collar 39 extends radially outwardly from the projectile body 15 and cooperates with the outside surface 35 of the ~~first~~ rearward leg 16 to form a skirt and a rearwardly opening annular cavity 37. The annular cavity 37 and the skirt act as an obturating surface in that the skirt inflates outward, upon firing, into engagement with and against the inner wall of the expelling end 14 of the shell casing 12 to prevent propelling gases from leaking therepast and, thus, forms a

circumferential seal.

[0027] The medial collar 39 comprises a tapered circumferential surface wall 41 and a flat annular land or shoulder or check line extension 43, the annular land being disposed in a plane substantially normal to the central longitudinal axis of the projectile body 15 and extending between the tapered surface wall 41 of the collar and the cylindrical wall 52 of the ~~second~~ forward leg 50. A junction 47 is formed between the surface wall 41 and the annular land 43. The circumferential surface wall 41 tapers radially outwardly and rearwardly from the junction 47 toward the ~~inserting~~ rearward end 29 to overlay the annular cavity 37 and to define the skirt for the annular cavity 37.

[0028] Referring to Figures 1 - 4, the driving band 17 is cylindrical and slidably fits onto and about the forward cylindrical wall 52 of the ~~second~~ forward leg 50. The annular land 43 defines a stop or an inward limit for positioning the cylindrical driving band 17 relative to the leg 50.

[0039] The nose 18 is formed, preferably, from styrofoam. The nose 18 is a concave or U-shaped element or hollow body 20. In the embodiment shown, the nose is depicted as a generally hemispherically shaped dome or shell. The hollow body 20 includes a shaped wall ~~and~~ 21 having a dome-shaped interior surface 25 that terminates in an annular end face 22 ~~to form an~~ and forms an outwardly open interior chamber. The wall surface 25 of the interior chamber includes a cylindrical annular surface ~~26~~ 23 circumjacent to the annular end face 22 thereof, the annular surface ~~26~~ 23 having a diameter that is slightly less than the outer diameter of the cap 75 to form a locking interference fitment therewith and form a closed payload chamber. The outer diameter of the ~~ridge~~ body 20 circumjacent to the open end ~~22~~ of the nose 18 is preferably substantially the same as, or slightly less than, the outer diameter of the second end 63 of the

driving band 17.

[0040] A chemical agent 28, preferably a powdered chemical agent, such as tear gas or the like, may be inserted into the payload chamber formed by the interior chamber of the nose ~~interior~~ and the second flat or planar end face 83 of the cap end 75. A marking powder 30 may be mixed with the chemical agent 28, as desired.

[0041] In assembling the projectile 11, the chemical agent 28 is inserted into the payload hollow formed by the shaped body 20 of the nose 18. The annular surface ~~26~~ 23 of the nose 18 is press-fitted and sealed around the cap 75 of the insert member 19. The weight 76 is assembled to the chamber 74 of the insert member 19, if not integrally formed with the material thereof. This subassembly is then secured to the leg 50, the cap 75 being urged toward and against the second end 63 of the driving band 17 simultaneously with the stem 77 being press fitted into the cavity 57.

Amendments to the Claims:

This "Listing of Claims" will replace all prior versions, and listings, of claims in the application:

1. Canceled.

2. Canceled.

3. Canceled.

4. Canceled.

5. (Currently Amended) The ammunition as claimed in claim ~~4~~ 9, wherein the nose includes an annular surface of a diameter slightly less than the outer diameter of said cylindrical cap, wherein the nose is frictionally secured to the cap.

6. (currently Amended) The ammunition as claimed in claim ~~5~~ 9, wherein the nose is comprised of a compliant material that resists deformation during flight but is readily breached upon impact whereby to disperse the payload around the point of impact.

7. (Original) The ammunition as claimed in claim 6, wherein the nose is comprised of Styrofoam.

8. (Currently Amended) The ammunition as claimed in claim ~~4~~ 9, wherein the closure member is comprised of foam rubber.

9. (Currently Amended) A non-lethal ammunition projectile, comprising:

a projectile body removably emplaceable within a shell casing, the body including a forward leg having a ~~cylindrical~~ forward end portion for mounting a payload, a rearward leg having a first chamber for receiving a propellant, and a medial collar exteriorly configured for sealing engagement with the casing wall when the projectile is in the casing, the forward end portion defining a second chamber and having an interior wall, and the forward end portion, the legs, and the collar being generally cylindrical and concentrically disposed along a central longitudinal axis,

a mass disposed within the forward end portion for balancing the projectile and inhibiting tumbling of the projectile in flight, and

a payload subassembly removably emplaceable within the ~~cylindrical~~ forward end portion, the payload subassembly comprising a closure member of resilient ~~foam~~ material, a nose member, and a payload, the closure member including a stem sized to frictionally engage the interior wall of the forward ~~cylinder~~ end portion and having a third chamber to receive the ~~weight~~ mass whereby to position the ~~weight centrally of the~~ mass along the central longitudinal axis, and a cylindrical cap sized to ~~closed~~ close the forward end of ~~the~~ said second chamber, and said nose member being dome-like and connectible in an interference fit to the cap whereby to form a fourth chamber within which the payload is received.

10. (Currently Amended) The ammunition as claimed in claim 9, further comprising:

a cylindrical band fitted about the exterior of the forward end portion, the band having an interior surface and a contoured exterior surface for guiding the projectile in the air, and

at least one mating protuberance and depression operating, respectively, between the ~~inner~~ interior surface of the band and the outer exterior surface of the forward end portion to resist relative rotation therebetween.

11. (Currently Amended) The ammunition as claimed in claim 10, wherein the protuberance extends radially outwardly from the outer exterior surface of the forward end portion and the depression extends into the ~~inner~~ interior surface of the cylindrical band, whereby to prevent relative rotation therebetween.

12. (Currently Amended) The ammunition as claimed in claim 10, wherein the protuberance extends radially inwardly from ~~inner~~ interior surface of the cylindrical band and the depression extends inwardly of the exterior surface of the forward end portion, whereby to prevent relative rotation therebetween.

13. (Original) The ammunition as claimed in claim 10 wherein the protuberance and depression are axially elongated.

14. (Currently Amended) The ammunition as claimed in claim 10, wherein the cylindrical band is comprised of a resilient deformable material, the protuberance and depression are generally hemispherically shaped, coaxial insertion of the cylindrical band about the forward end portion operating bring the ~~nub~~ protuberance into engagement with and force the band outwardly until seating fitment of the ~~nub~~ protuberance within the depression.

15. (Original) The ammunition as claimed in claim 9, further comprising:

a cylindrical band fitted about the exterior of the forward end portion, the band forming a contoured exterior surface for guiding the projectile in the air, said band comprising first and second cylindrical ring portions each having a cutout along an end face thereof, the end faces being abutted and the cutouts brought into registry whereby to form an aperture, and

at least one mating protuberance extending radially outwardly from the forward end portion for fitment within the aperture to resist relative rotation therebetween.

16. (Original) The ammunition as claimed in claim 15, wherein said ring portions are comprised of a flexible elastomeric material.

17. (Original) A universal projectile ammunition, comprising:

a shell casing having a primer and propellant receiving end, a central casing wall defining a central chamber, and a payload expelling end,

a projectile body within the casing having a first leg disposed proximate to the primer end, a second leg proximate to the expelling end, and a medial closure collar which seals the central chamber, the first leg having a detonation chamber therein, and the second leg defined by a cylindrical wall having at least one longitudinally extending rib thereon and forming a central cavity,

a cartridge containing propellant extending into the propellant receiving end and into enclosed relation with the detonation chamber, the propellant and the expelling end of the cartridge being sealed by a sealant adhesive comprising a mixture of an ultraviolet light curable acrylate composition and a photo-initiator,

a cylindrical sleeve mounted onto the second leg, the sleeve having at least one longitudinally extending axial cavity therein, the axial cavity receiving the rib therein,

a resilient closure cap having a stem frictionally engaged with the wall of the central cavity and a cylindrical cap disposed in closing relation with the central cavity,

a mass retained within a central recess of the stem and positioned proximate to the central collar,

a dome-shaped nose of resilient material frictionally engaged with the outer circumference of the cylindrical cap, whereby to form a chamber within which the payload is disposed.

18. (Currently Amended) The ammunition as claimed in claim 17, wherein the ~~acrylatecomprises~~ acrylate comprises a mixture consisting essentially of aliphatic urethane acrylate oligomer, high bonding acrylate hydroxyalkyl methacrylate, the sealant further comprising a silica filler photo-initiator.

19. (Currently Amended) The ammunition as claimed in claim 18, wherein the closure cap, mass, dome shaped nose, and payload comprise a subassembly that is assembled to the projectile body.

REMARKS

By this Reply, Claims 1-4 are cancelled, Claims 5, 6, 8-12, 14, and 18 are amended, and no claims are newly added. Upon entry of the present amendment, Claims 5-19 remain in the application.

Entry of this Reply and reconsideration of this Application is requested.

The above-identified Office Action ("Action") has been reviewed, the Examiner's comments carefully weighed, and the references carefully considered. In view thereof the present Reply is submitted.

Applicant's Attorney submits that by the amendments herein, that all bases of objection and/or rejection set forth in the Action have been traversed, obviated, or otherwise overcome.

Accordingly, withdrawal of the objections, and rejections is respectfully requested.

Election / Restrictions

The Examiner (Action, Para. 1) withdrew a pending restriction requirement.

Information Disclosure Statement

Prior published patents US-5,086,703 and US-5,453,451 were incorporated by reference into the specification. The Examiner notes that references listed in the specification are not considered by the Examiner unless they have been cited by the Examiner on Form PTO-892.

In the Examiner's Action, the Examiner relied on US-5,086,703 and US-5,453,451 to reject certain of the claims of the Application. As such, US-5,086,703 and US-5,453,451 have been "considered" by the Examiner.

At present, Patent form PTO-892 only lists US-5,086,703. Applicant's Attorney requests that US-5,453,451 be entered on PTO-892 to indicate this reference was considered by the Examiner.

Drawings

The Examiner objected (Action, Para's 3, 4, 5, and 6) to the drawings for reasons given. First the Examiner objected to the reference characters "16" and "50" and their designation. Second, the Examiner objected to the numbers of FIGS. 8 and 9 as being incorrect.

By this Reply, FIGS. 1, 2 and 3 and the Specification are amended in a manner to clarify the elements "16" and "50" and the use of the terms rearward end portion, rearward leg, first leg, forward end portion, forward leg, and first leg.

Further, FIGS. 8 and 9 are renumbered as FIG. 9 and FIG. 8.

These changes are submitted as obviating the Examiners objections.

A copy of the drawings, showing the changes requested in red, and labeled "Changes Requested", and a copy of the drawings, showing the drawings after the changes are made, and labeled "Replacement Drawings", are submitted herewith.

Specification

The disclosure is objected to. The Examiner contends (Action, Para. 7) that FIG. 8 should be FIG. 9 and vice versa.

By this Reply, the numbers of the drawings (FIGS. 8 and 9) are renumbered in a manner requested and thus the objection to the Specification herein is believed obviated.

Claim Objections

Claim 9 is objected to (Action, Para. 8) because of an informality noted by the Examiner regarding the claim terms "the cylindrical forward end portion" and "forward end portion"; and the term "the weight" should be "the mass".

Claim 9 is amended herein and in a manner suggested by the Examiner.

Accordingly, the Examiner's objection to Claim 9 is believed obviated.

Claim Rejections 35 USC Section 112, Second Paragraph

Claims 9-16 are rejected (Action, Para. 9) under 35 USC Section 112, second paragraph as being indefinite. The Examiner believes that the term "the forward cylinder" is confusing, for reasons given.

Claim 9 is amended herein and in a manner suggested by the Examiner, such as by drawing changes requested herein and the term "the forward cylinder" being rewritten as "the forward end portion". As rewritten herein, Claim 9 is believed to be definite.

Accordingly, the Examiner's rejection under 35 USC Section 112, second paragraph is believed obviated.

Allowable Subject Matter

The Examiner indicated (Action, Para. 16) that Claims 9-16 would be allowable if rewritten or amended to overcome the rejections under 35 USC Section 112, second paragraph.

Claims 9-16 are amended herein and in a manner believed to obviate the Examiner's rejection under 35 USC Section 112, Second paragraph.

Claims 9-16 are submitted as being allowable.

Claims 17-19 are allowed.

Claim Rejections – 35 USC Section 102 (a)

Claims 1 and 4-6 are rejected (Action, Para. 12) under 35 USC Section 102(b) as being anticipated by Klein (US-5,086,703).

To advance prosecution and simplify issues, Claims 1-4 are cancelled.

Claims 5 and 6 are amended to depend from allowable Claim 9. Claims 5 and 6 further define the arrangements and/or requirements of the structure required in Claim 9 and are allowable for the same reasons that Claim 9 is allowable.

Claim Rejections – 35 USC Section 103(a)

Claims 7-8 are rejected (Action, Para. 14) under 35 USC Section 103(a) as being unpatentable over Klein (US-5,086,703).

Applicant's Attorney traverses the Examiner's rejection.

Dependent Claims 7 and 8 are amended herein and variously depend from allowable Claim 9.

Claims 7 and 8 are submitted as being patentable for the same reason Claim 9 is allowable.

Claims 2 and 3 are rejected (Action, Para. 15) under 35 USC Section 103(a) as being unpatentable over Klein (US-5,086,703) in view of AAPA (i.e., Applicant's Admitted Prior Art).

To advance prosecution and simplify issues, dependent Claims 2 and 3 are cancelled.

Conclusion

It is respectfully submitted that by this amendment, all bases of objection and rejection have been traversed and overcome.

Claims 17-19 are allowed by the Examiner.

Claims 9-16 were noted as being allowable, if rewritten in a manner to overcome a Section 112, second paragraph rejection. Applicant's Attorney submits that Claims 9-16, as amended herein, are definite and thus allowable.

Dependent Claims 5-8, as amended herein, depend from now allowable independent Claim 9. Applicant's Attorney submits that Claims 5-8 are patentable and allowable.

Thus, Applicant's Attorney submits that by the present amendment, Claims 5-19 are patentable and that the Application has been placed in condition for allowance.

A Notice of Allowance is respectfully requested.

If the Examiner feels that prosecution of this Application can be expedited, then he courteously is requested to place a phone call to Applicant's Attorney at the number listed below.

Respectfully Submitted,

Arnold S. Weintraub, Reg. 25523
THE WEINTRAUB GROUP, PLC
32000 Northwestern Highway, Suite 240
Farmington Hills, MI 48334
(248) 865-9430

Dated: Oct. 27, 2004

Attachments: Corrected and Replacement Drawing Sheets
(Sheet 1 / 3, and Sheet 2 / 3)

Amendments to the Drawings:

FIG. 1: delete the arrowhead on the leadline for "16", add an arrowhead at the end of the leadline for "17"; and clarify the exterior contour "69" and "71" of the driving band "17".

FIG. 2: change the numbers "16" and "15" to read "15" and "16"; change the number "74" to read "57" for the forward cavity in the leg "50" of the projectile body "11"; add the number "74" and a lead line pointing therefrom to a chamber in the insert member "19"; add the number "21" and a leadline pointing therefrom to the dome shaped wall of the nose "20"; add the number "25 and a leadline pointing therefrom to the interior surface of the nose "20"; delete the number "24" and the leadline therefor; and add the number "23" and a leadline pointing therefrom to a cylindrical annular surface of the interior wall "25" circumjacent to the open end of the nose "20".

FIG. 3: change the numbers "16" and "15" to read "15" and "16"; place an arrowhead at the end of the leadlines from "17" and "19"; shorten the end of the leadline from "54"; and delete the number "74" and the leadline therefore.

FIG. 4: replace the number "17" with "63"; add a number "17" and a leadine pointing therefrom to the drive band; shorten the leadline from "41" to point to the tapered surface; and shorten the leadline pointing to the forward leg "50" and end the leadline with an arrowhead.

FIG. 8: change the Figure number "8" to read "9".

FIG. 9: change the Figure number "9" to read "8".

FIG. 10: change the leadline from "243" to point the end face.

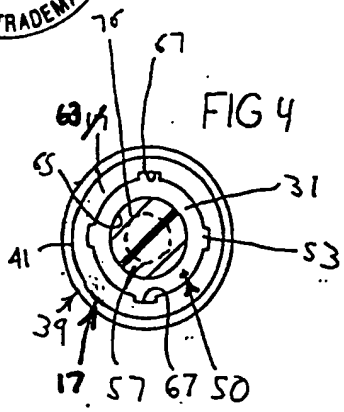


FIG 4

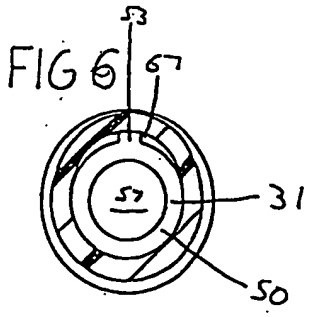


FIG 6

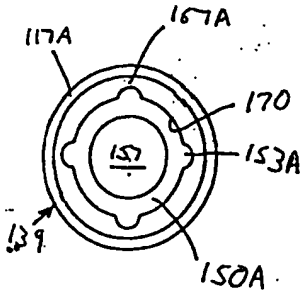


FIG. 7

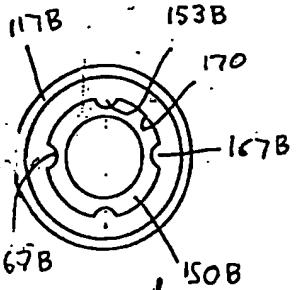


FIG 9

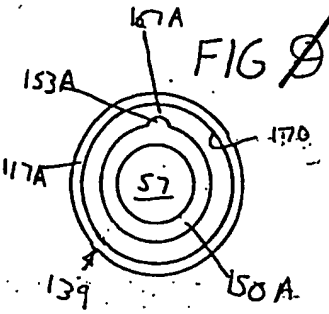


FIG 8

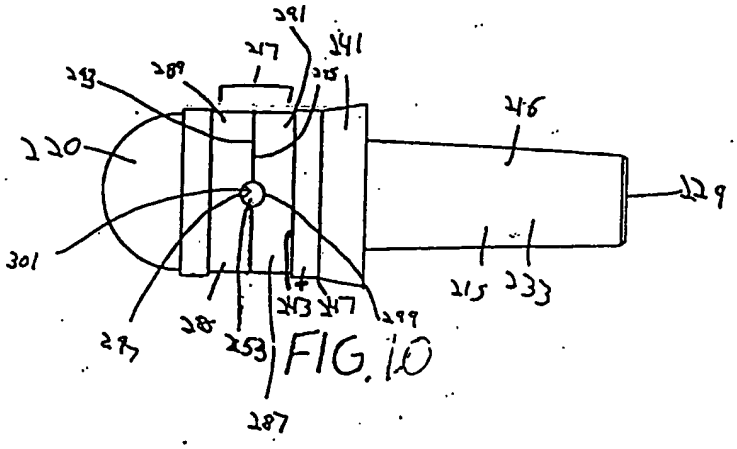


FIG. 10

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FIG 1

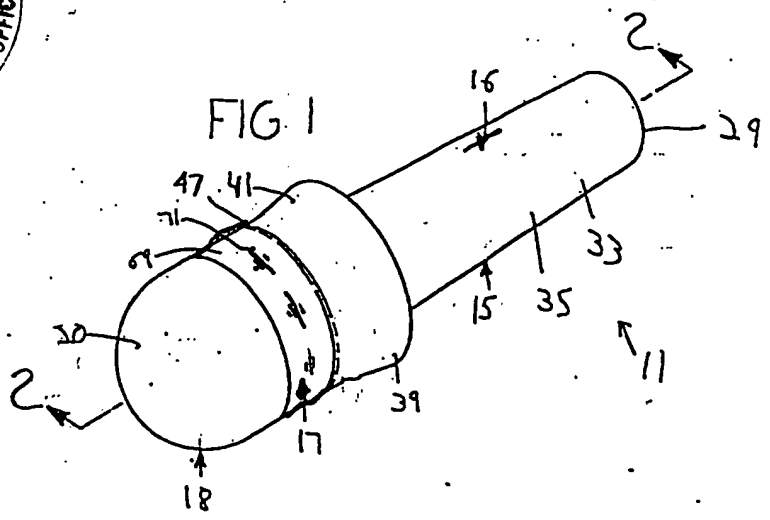

FIG 2

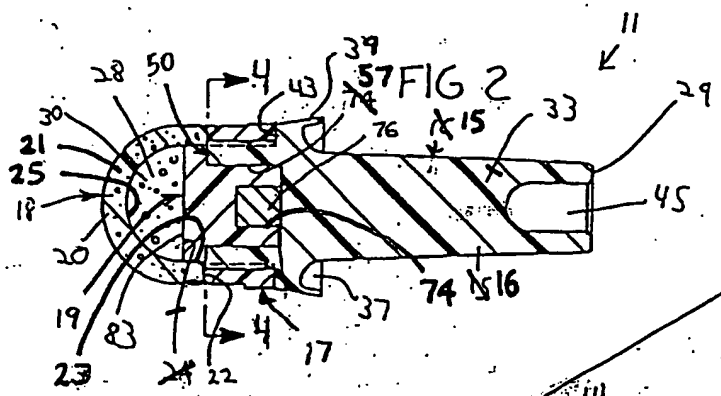

FIG3